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Efficiency of thin film photovoltaic paint: A brief review (Article)

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Abstract

The integration of thin film solar paint in the field of photovoltaics has received much attention because of its potential to replace the conventional solar cells. The solar paint has shown enormous potential due to its tunable size characteristics, flexibility and cost-effective way of manufacturing. However, there is still a need for the improvement in the power conversion efficiencies of these paints, which emphasis this study to do further for characterizing the optimum materials for the paint. The aim of this study is to find the materials for the paint from reviewing the related published materials, which would have high electrical and thermal conductivities. This study also focuses on the techniques to improve the solar power conversion efficiency by using the paint just applying on any conductive surface. The manuscript presents the recent developments of materials and synthesis techniques for developing photovoltaic paints. Consequently, it describes the suitable material and deposition technique to improve the efficiency of thin film photovoltaic paint. © BEIESP.

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